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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:

RODGERS et al.

Serial No.: 10/099,724

Filed: March 15, 2002

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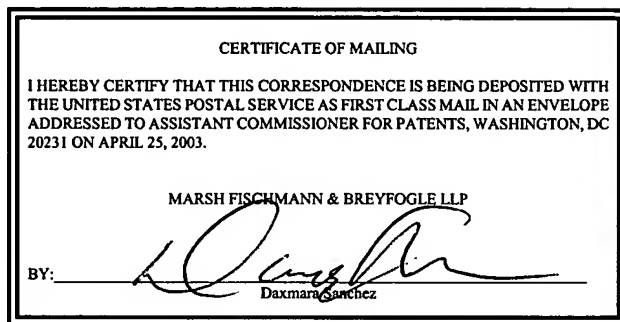
Atty. File No.: 50060-00051

For: "SHIELDED MULTI-CONDUCTOR
INTERCONNECT BUS FOR MEMS"

) Group Art Unit: 2827

) Examiner: Dinh, Tuan T.

) RESPONSE TO RESTRICTION AND
) ELECTION REQUIREMENTS



Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Applicant submits this Amendment and Response to address the Office Action having a mailing date of March 25, 2003. Although Applicant believes that an extension of time is not needed, please consider this a petition for an extension of time under 37 C.F.R. 1.136(a) if an extension is necessary to maintain the pendency of the present application and charge the extension fee, if necessary, to Deposit Account No. 50-1419.

In the March 25, 2003 Office Action, the Examiner issued a Restriction Requirement with regard to the above-identified patent application. Generally, the Examiner contends that Claims 1-15 together with Claims 24-41 (Group I) and Claims 16-23 (Group II) are distinct inventions. Applicant hereby elects to prosecute Claims 1-15 and 24-41 (Group I) in this patent application. However, Applicant respectfully reserves the right to pursue Claims 16-23 (Group II) in a subsequent divisional/continuation application.

In the March 25, 2003 Office Action, the Examiner also issued an Election Requirement with regard to the above-identified patent application. Generally the Examiner contends that the present application includes claims directed to a total of nine patentably distinct species, namely Species 1

according to Figure 3A, Species 2 according to Figure 3B, Species 3 according to Figure 3C, Species 4 according to Figures 4A-4B, Species 5 according to Figures 4C-4D, Species 6 according to Figure 5B, Species 7 according to Figure 5C, Species 8 according to Figure 6, and Species 9 according to Figure 7.¹ Applicant hereby provisionally elects with traverse to prosecute Claims readable on Species 3 (according to Figure 3C) in this patent application. Of Claims 1-15 and 24-41 remaining after Applicant's election herein in response to the Restriction Requirement, Applicant respectfully submits that Claims readable on Species 3 include Claims 1-8, 10-15, 24-30, and 32-41.

Applicant respectfully requests that the Examiner withdraw the Election Requirement made in the March 25, 2003 Office Action and examine all of the Claims elected herein by Applicant in response to the Restriction Requirement, namely all of Claims 1-15 and 24-41. In the March 25, 2003 Office Action the Examiner contends that no claims are generic. Applicant respectfully disagrees and submits that Claim 33 is generic to each of the species identified by the Examiner. In this regard, Claim 33 includes the following limitations: (1) a substrate; (2) a first dielectric layer overlying and supported by at least a portion of said substrate; (3) an electrically conductive line formed on said first dielectric layer; (4) a pair of parallel electrically conductive walls formed on said first dielectric layer, each said electrically conductive wall being located on an opposing side of said electrically conductive line and including an upper section extending above the level of said electrically conductive line; and (5) an electrically conductive shield formed in a spaced relation above said electrically conductive line and in contact with said upper sections of said electrically conductive walls. Each of these five limitations are present each of the species identified by the Examiner, and thus Claim 33 reads on each of the species and is therefore generic. MPEP 806.04(d).

A reasonable number of species of an invention may be claimed in different claims in one application where a claim is generic to all the claimed species. 37 C.F.R. 1.141(a). Applicant respectfully submits that the number of species present in the application is reasonable. In this regard, each species identified by the Examiner is an example of a shielded electrical interconnect architecture fabricated from various layers of dielectric material (e.g., silicon dioxide, silicate glass, thermal oxide, silicon nitride) and electrically conductive material (e.g., doped polysilicon) on a substrate (e.g., a silicon substrate), whereby the possibility of undesirable cross-talk between

¹ Applicant has assumed that the Examiner intended the second "Specie IV" to instead read "Specie VI", "Specie IIV" to instead read "Specie VII", and "Specie IIIV" to instead read "Specie VIII".

adjacent interconnect lines is reduced and the possibility of short circuits due to particles or the like settling across adjacent interconnect lines is reduced while also optimizing the amount of footprint required on the substrate for the interconnect lines. It would seem that this is a fairly narrow field of invention and that the relevant prior art references that the Examiner would have to consider would be limited in number. Furthermore, given the common features present in each species (i.e. a substrate, electrically conductive lines, electrically conductive walls, and an electrically conductive shield over the lines) search strategies could likely be developed by the Examiner that would be applicable to evaluating the multiple species that are disclosed in the present patent application and that are covered by one or more of the pending claims.

In view of the foregoing, Applicant respectfully requests that the Examiner withdraw the outstanding requirement to elect a single species, and proceed with examination of Claims 1-15 and 24-41 as originally filed. In the event that a telephone conversation would further prosecution, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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